

Can Profitability Moderate the Impact of Green Investment, Corporate Social Responsibility, and Good Corporate Governance on Company Value on the SRI-KEHATI Index?

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Abstract

The Sri-Kehati Index shares, which offer shares of environmentally friendly companies, are of great interest to investors who care about the environment. This research aims to determine the determinant factors of company value in Sri-Kehati Index companies, with profitability as a moderating variable. The determinant factors used in modeling are green investment, corporate social responsibility, and good corporate governance. ROA proxied profitability, and company value is proxied by price book value. The research uses a quantitative approach with descriptive-verification methods. The research population is companies that are members of the Sri-Kehati Index 2016-2021; the sample is determined using a purposive sampling technique—data analysis techniques using panel data regression and Moderated Regression Analysis (MRA). The research results show that partially green investment and good corporate governance have a positive effect, but corporate social responsibility does not affect company value. Profitability can moderate the relationship between good corporate governance and firm value. Besides that, green investment, corporate social responsibility, and good corporate governance simultaneously influence the company value of companies that are members of the Sri-Kehati Index stock group. The results of this research can be a basis for consideration by investors who care about the environment in investment decisions and can be a reference for further research. It is hoped that the results of this research will encourage many companies to implement green investments to help overcome environmental problems.

Keywords: Green-Investment, Corporate-Social-Responsibility, Good-Corporate-Governance, Firm-Value

How to Cite:

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1. Introduction*1.1. Environmental Issues*

Global warming, which impacts climate change, is a fundamental problem that poses a severe threat to the ecosystem of human life, which can threaten sustainable development and poverty alleviation. In the 2015 Paris Agreement contained in the UN Framework Convention on Climate (COP21), countries have agreed to strengthen the global response to the threat of climate change by preventing global temperature increases in this century. According to the WMO State of the Global Climate 202 report, there has been a drastic rise in sea levels in the last seven years due to global warming problems (World Meteorological Organization, 2021).

This condition significantly impacts climate change and the reduction of non-renewable resources, threatening the continuity of life on planet Earth. Responding to this problem, the government and the business world have begun to develop sustainable, environmentally friendly business models in line with increasing public awareness of their role in overcoming the problem of climate change.

1.2. Environmentally Friendly Investment

Environmentally friendly investment (green investment) focuses on implementing environmentally friendly business models proven to improve company performance. Several countries rank environmentally friendly companies and publish them to the public. This policy encourages companies to fulfil environmentally friendly indicators in their business practices to gain a positive image from stakeholders, which will support the company's long-term sustainability. Lee et al. (2016) and Popescu et al. (2019). The Ministry of Environment and Forestry in the Public Disclosure Program for Environmental Compliance (PROPER) performs the performance ranking of environmentally friendly companies in Indonesia.

1.3. Determinant Factors of Environmentally Friendly Company Value

Research in various countries proves that companies that implement environmentally friendly investments (green investment) can improve their financial performance, thereby supporting long-term business sustainability as research by Nakamura (2011) in Japan, Popescu et al. (2019) in Romania, Luan et al. (2016) in Taiwan, Siedschlag & Yan, (2023) in Ireland, and Yao et al. (2021) and Chen et al. (2021) in China. As reflected in their share prices, companies with good financial performance will increase their value. Several research results show the influence of green investment on company value. The research results of Yatie & Tandika (2019) show that the Green Investment Index influences financial performance and stock prices. Meanwhile, research by Putriani (2019) and Chen et al. (2021) proves the influence of Green Investment and Good Corporate Governance (GCG) on the value of banking companies.

The development of the research above proves that Green Investment and Good Corporate Governance (GCG) influence company value, while profitability can act as a mediator variable. Tanasya & Handayani (2020), Asni & Agustia (2022). On the other hand, companies that consistently set aside a portion of their profits to support Corporate Social Responsibility (CSR) programs receive positive assessments from the public, thereby supporting the company's long-term sustainability. This shows that CSR programs can influence company value, as research results by Gregory et al. (2014) and Fatemi et al. (2018) show.

Likewise, business activities that operate by paying attention to environmental, social, and governance (ESG) issues will impact increasing financial performance and company value. As long as good corporate governance (GCG) pays attention to social values and environmental sustainability, the company will gain legitimacy and support from stakeholders. Several studies show that companies implementing good corporate governance (GCG) will get a positive response from the public, increasing company value. Ganda et al. (2015); Kumarasiri & Jubb (2016) and Indriastuti & Chariri (2021).

Santis et al. (2016) stated that investors are willing to pay more for companies that adopt CSR policies, have transparent management, and implement Good Corporate Governance (GCG) well. GCG can help shareholders trust and ensure that all stakeholders are treated well. A sound system will provide adequate protection for shareholders to recover their investments moderately, appropriately, and efficiently and ensure that management acts in the company's interests (Mahrani & Soewarno, 2018).

The results of the empirical study above prove that Green Investment, Corporate Social Responsibility (CSR), and Good Corporate Governance (GCG) are independent variables that can influence company value. Meanwhile, research by Oktaviani (2019) and Panggau & Septiani (2017) shows that profitability can moderate the relationship between environmental performance and company value.

2. Literature Review

2.1. Green Investments

The increasing awareness of society to play a role in overcoming the problem of global warming has resulted in more and more investors who are only willing to invest in environmentally friendly companies. They refuse to invest in companies that do not meet ethical standards and boycott environmentally polluting companies. They will consider green investments as socially responsible investments, in line with the concept of ecological civilisation (Han et al., 2020)

Green Investment is an investment in clean manufacturing technology (clean production) to support environmentally friendly company activities. Green investment is a sustainable investment that aims to improve the economy by preserving the environment to maintain life on Earth long-term (Huang & Lei, 2021).

Green Investment refers to the total investment made by a company to reduce the negative impact of the company's activities. Green Investment (GI) in this research is measured by the PROPER rating published by the Ministry of Environment and Forestry (Indriastuti & Chariri, 2021). Company ranking based on PROPER criteria, divided into:

a. Gold (score = 5)

The company has carried out more environmental management than required and made sustainable community development efforts. For businesses and activities that have successfully implemented efforts to control pollution or environmental damage.

b. Green (score = 4)

Companies that have carried out environmental management in excess of what is required have: 1) biodiversity; 2) Environmental Management System; 3) Reduce, Reuse, Recycle (3R) Solid Waste; 4) Reduce, Reuse, Recycle (3R) B3 Waste; 5) Conservation to reduce the burden of water pollution; 6) Reducing Emissions; 7) Energy Efficiency

c. Blue (score = 3)

The company has carried out the required environmental management efforts in accordance with applicable provisions or regulations (has fulfilled all aspects required by the Ministry of Environment). Minimum scores that companies must achieve in the areas of: 1) Water Governance Assessment; 2) Land Damage Assessment; 3) Control of Marine Pollution; 4) B3 Waste Management; 5) Air Pollution Control; 6) Water Pollution Control; 7) Implementation of Environmental Impact Analysis (AMDAL)

d. Red (score = 2)

The company has made environmental management efforts, but only partially achieved results in accordance with the requirements as regulated in statutory regulations in the fields of: 1) Water Management Assessment; 2) Land Damage Assessment; 3) Control of Marine Pollution; 4) B3 Waste Management; 5) Air Pollution Control; 6) Water Pollution Control; 7) Implementation of Environmental Impact Analysis (AMDAL)

e. Black (score = 1)

The lowest rank in managing the environment, has not made efforts in managing the environment as required so that it has the potential to pollute the environment, and is at risk of having its business license closed by the Ministry of Environment in the fields of: 1) Water Management Assessment; 2) Land Damage Assessment; 3) Control of Marine Pollution; 4) B3 Waste Management; 5) Air Pollution Control; 6) Water Pollution Control; 7) Implementation of Environmental Impact Analysis (AMDAL)

Khan et al. (2019) stated that Green Investment can improve a company's reputation and competitive advantage in the long term. Green Investment refers to the total investment made by a company to reduce the negative impact of the company's activities. Meanwhile, research by Khalid et al. (2023) shows the importance of encouraging companies to make environmentally friendly investments, which are proven to increase company profits in the long term. These conditions trigger companies to consider sustainable business models to gain economic benefits by paying attention to social responsibility to achieve competitive advantage (Popescu et al., 2019).

2.2. Agency Theory

Implementing green investment requires many funds and often causes conflict between management and stakeholders (Ameer & Othman, 2012). Agency theory explains that managers

with the authority to manage a company sometimes make detrimental decisions to shareholders and stakeholders. Thus, agency theory discusses the differences in interests between management shareholders and other stakeholders. Panda & Leepsa (2017); Tanasya & Handayani (2020). This triggers companies to align company values with social values and applicable norms, culture, and regulations to gain legitimacy from stakeholders. (Fernando & Lawrence (2018); Indriastuti & Chariri (2021)).

2.3. Legitimacy Theory

Legitimacy theory is a company management system oriented towards taking sides with society, government, individuals, and community groups (Archel et al., 2009). Legitimacy theory illustrates a difference between the values according to the company and the values that exist in society. Therefore, a company could be in a threatened position if it has this difference, which is known as a legitimacy gap.

Legitimacy theory explains that company activities must pay attention to applicable boundaries and norms to gain acceptance and recognition from stakeholders. One strategy to gain company legitimacy is by implementing green investment.

2.4. Signaling Theory

Signalling theory is a theory that assumes that the information held by managers and external investors is not the same (asymmetric information) because, in fact, managers often have better information than external investors (Brigham & Houston, 2012). To overcome information asymmetry, managers must provide information to interested parties by publishing annual reports, including financial and company sustainability reports.

Signal theory was developed by Ross (1977) based on the existence of asymmetric information between information originating from management (well-informed) and information originating from interested parties or shareholders (poorly-informed). This theory assumes that management will provide information to investors or shareholders when they get good information related to the company, such as increasing company value. However, shareholders do not trust the information provided because management is considered to have their interests.

2.5. Green Investment and Company Value

Green investments in this research use the PROPER rating issued by the Ministry of Environment and Forestry, Republic of Indonesia. PROPER has the following measurement scale: a score of five (5) for a Gold rating (excellent), a score of four (4) for a Green rating, a score of three (3) for a Blue rating, a score of two (2) for a Red rating, and a score of one (1) for Black ratings (abysmal) (Chariri et al., 2018; Indriastuti & Chariri, 2021).

Company value is investors' perception of the company's level of success (Indriastuti & Chariri, 2021). The company value in this research uses Price to Book Value (PBV).

$$\text{Price to Book Value} = \frac{\text{Price to Share.}}{\text{Book Value per Share}}$$

Managing environmental issues can ultimately increase company value (Rokhmawati et al., 2015); Xie et al., 2016). Several studies supported this by a positive relationship between green investments and company value (Tanasya & Handayani, 2020; Chariri et al., 2018; Indriastuti

& Chariri, 2021). So, the first research hypothesis (H1) : Green Investment Positively Affects Company Value.

2.6. Corporate Social Responsibility (CSR) and Company Values

On the other hand, company legitimacy can also be obtained by implementing a Corporate Social Responsibility (CSR) program. Legitimacy theory believes organizations look at investors' rights and pay attention to the general public's rights. Companies that do not care about the surrounding environment will reduce the value of their social legitimacy (Hafiz et al., 2016)

Corporate Social Responsibility (CSR) is a commitment to act ethically, operate legally, and contribute to improving the quality of life of employees and their families, local communities, and the wider community. The CSR concept involves responsible partnerships between government, companies, and local communities that are active and dynamic. (Nayenggita et al., 2019; Marnelly, 2012)

Corporate Social Responsibility (CSR) is closely related to social responsibility in achieving sustainable economic activity as a form of corporate accountability towards society, the nation, and the international world. CSR can strengthen a company's financial performance by increasing the company's value (Rahayu & Paramita, 2023).

Corporate Social Responsibility (CSR) is measured using the Corporate Social Responsibility Disclosure Index (CSRDI) by looking at six performance indicators consisting of 91 items based on the GRI G4 Guidelines, which focus on three main aspects: Economic, Environmental, and Social. The six performance indicators contained in the Global Reporting Initiative (GRI) include Economy (AEC) with nine items, Environment (AEN) with 34 items, Labor (ALA) with 16 items, Human Rights (AHR) with 12 items, Social and Community (ASO) with 11 items, and Responsibility (APR) with nine items (GRI, 2020). CSR disclosure can be calculated using the following formula:

$$CSR_{ij} = \frac{\sum X_{ij}}{n_j}$$

Information:

CSR_{ij} = Total number of CSR disclosures by the company.

$\sum X_{ij}$ = Number of items disclosed by company j

n_j = Total number of company items j, (maximum score 91).

X_{ij} = Dummy variable, if the item is disclosed it has a value of 1 and if the item is not disclosed it has a value of 0

Previous research conducted by Fauzi et. all (2016), Depari & Wahyudi (2016), Indriastuti & Chariri (2021) proves that Corporate Social Responsibility has a positive effect on company value. Thus, the second research hypothesis (H2) :Corporate Social Responsibility (CSR) Positively Affects Company Value.

2.7 Good Corporate Governance (GCG) and Company Values

On the other hand, the corporate governance theory of Good Corporate Governance (GCG) was developed based on stewardship and agency theories, which were present first. Stewardship theory explains that managers will prioritize the interests of shareholders in carrying out company operations transparently. This theory encourages realising good corporate governance to support owner satisfaction (Jefri, 2018).

Freeman (2015) explains that good corporate governance (GCG) is a system that directs and controls a company and aims to achieve a balance between the company and its stakeholders. This relates to the regulatory authority of owners, directors, managers, shareholders, etc. Companies that implement good governance have the potential to achieve sustainable profits, thereby increasing company value. The implementation of GCG aims to reduce institutional competition and ensure that reports submitted to stakeholders help increase the company's value in the eyes of investors.

In reality, the implementation of GCG in each country is different, so there are several versions of GCG principles. Good Corporate Governance (GCG) in this research uses measurements of 1) independent commissioner; 2) managerial ownership; 3) institutional ownership; and 4) audit committee size; by research conducted by Anik et al. (2021), Indriastuti & Chariri (2021), Suhadak (2019).

$$\text{Independent commissioner} = \frac{\text{Number of independent commissioners}}{\text{Number of members of the board of commissioners}}$$

$$\text{Managerial ownership} = \frac{\text{Number of shares owned by management}}{\text{Number of shares outstanding}}$$

$$\text{Institutional Ownership} = \frac{\text{Number of institutional shares}}{\text{Number of shares outstanding}}$$

$$\text{Audit Committee Size} = \text{Number of audit committee members}$$

Thus, the third research hypothesis (H3) : Good Corporate Governance Positively Affects Company Value.

2.8 Profitability as a Moderator of The Relationship Between Green Investment and Company Value

Profitability measurement uses Return on Assets (ROA) to measure a company's ability to generate net profits based on the total assets it owns.

$$\text{Return on Assets (ROA)} = \frac{\text{EAT}}{\text{Total Assets}} \times 100\%$$

This ratio can determine whether a company has used its assets efficiently in its business activities. Companies that invest by paying attention to environmental problems can increase company value. The company's ability to generate profits will further strengthen the influence

of green investment on company value. Companies that comply with environmental regulations in investing or companies that implement green investment will receive positive assessments from the public. They will buy the company's products so that it will increase company profits which ultimately has an impact on increasing company value. This is in accordance with the research results of Tanasya & Handayani (2020) and Asni & Agustia (2022) which show that ROA is proven to strengthen the influence of green investment on company value. Thus, the fourth research hypothesis (H4): Profitability Can Moderate the Relationship between Green Investment and Company Value.

2.9 Profitability Moderates The Relationship Between Corporate Social Responsibility And Company Value.

Companies that implement CSR will operate ethically and be responsible for the environment. This will receive a positive assessment from the public, thereby supporting the achievement of profit targets. Part of the company's profits is used to fund CSR programs so that the company's ability to earn profits will strengthen the relationship between CSR and company value. This is by the research results of Mukhtaruddin et al. (2019), which show that financial performance can strengthen the relationship between CSR and company value. Thus, the sixth research hypothesis, Profitability, can moderate the relationship between Corporate Social Responsibility and company value.

2.10 Profitability as a Moderator of the Relationship between Good Corporate Governance and Company Value

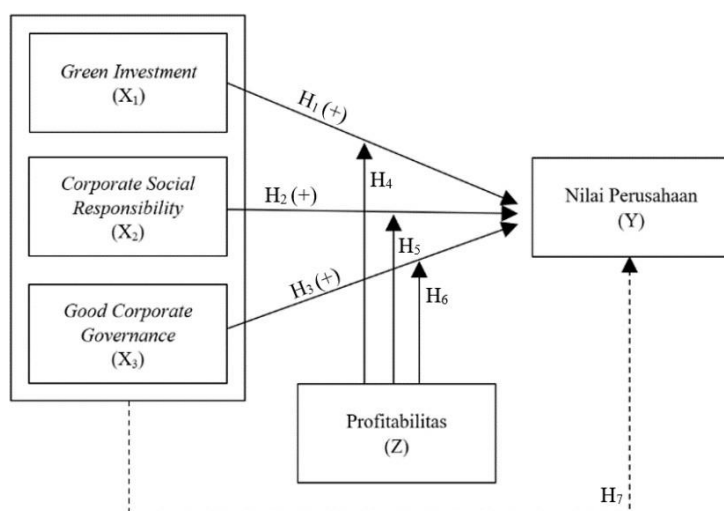
The implementation of GCG guarantees good company management to stakeholders, including shareholders, lenders, employees, executives, government, customers, and other stakeholders (Widigdo, 2013). Better corporate governance will have a more positive impact on the company's image in the eyes of the public and have the potential to increase company profits. Many researchers have found a positive relationship between GCG and profitability, such as research by Suhadak et al. (2019) and Anik et al. (2021). The results of their research show that companies that implement GCG have succeeded in increasing profitability significantly. The research results of Tanasya & Handayani (2020) show that GCG positively affects company value, while the ROA variable can strengthen the relationship between GCG and company value. Thus, the seventh research hypothesis, Profitability, can moderate the relationship between Good Corporate Governance and company value.

3. Research Method

The objects of this research are green investment, corporate social responsibilities, good corporate governance as an exogenous variable, company value as an endogenous variable, and return on assets as a moderating variable. The research uses quantitative methods with descriptive-causality analysis, which will explain the relationship between variables based on the results of statistical tests.

The research population is 32 companies in the Sri-Kehati index for 2016 - 2021. Based on the purposive sampling technique, the number of research samples was six companies, namely PT Japfa Comfeed Indonesia Tbk. (JPFA), Kalbe Farma Tbk. (KLBF), Perusahaan Gas Negara Tbk. (PGAS), Semen Indonesia (Persero) Tbk. (SMGR), United Tractors Tbk. (UNTR) and Unilever Indonesia Tbk. (UNVR).

The data type used is panel data, a combination of time series and cross-sectional data. Secondary data sources were obtained from annual sustainability reports in the form of the Global Reporting Initiative (GRI) and PROPER. The data analysis technique uses panel data regression and *Moderated Regression Analysis* (MRA) with a research paradigm as follows :



4. Findings and Discussions

4.1. Conditions of Green Investment (GI), Corporate Social Responsibility (GCG), Good Corporate Governance (GCG), Profitability and Company Value.

Companies that are members of the Sri-Kehati Index have an average Green Investment value of 3.5454. This shows that most companies in the Sri-Kehati index have made environmental management efforts by applicable regulations. The company meets the "Blue" classification referring to the PROPER assessment determined by the Ministry of Environment and Forestry of the Republic of Indonesia. The maximum value of the GI is 4.636199 - 5; namely, the Gold rating is given to companies that have carried out environmental management more than required and have made 3R (Reuse, Recycle, Recovery) efforts, implemented a sustainable environmental management system, made efforts which are helpful for the long-term interests of society. This ranking was achieved by PT Semen Indonesia Tbk for four consecutive years from 2016 to 2019 and PT. Kalbe Farma Tbk for three consecutive years from 2018 to 2020.

The average CSR value of companies in the Sri-Kehati Index is 32.42%. This shows that the company fulfils 32.42% of the 91 items based on the G4-Guidelines Global Reporting Index, which focuses on three main aspects: economic, environmental, and social. The maximum CSR value of 69.23% was achieved by PT Perusahaan Gas Negara Tbk in 2020, while PT Kalbe Farma Tbk obtained the minimum value of 15.38% in 2016 and 2017.

The average GCG value of companies listed on the Sri-Kehati Index is 1.16. This GCG value is the average value of Independent Commissioners, Managerial Ownership, Institutional Ownership, and Audit Committee Size. PT Gas Negara Tbk owned the maximum GCG value of 1.48 in 2019 and 2020, while the minimum GCG value was 0.99, obtained by PT Kalbe Farma Tbk.

The average ROA value of companies in the Sri-Kehati Index is 12.72%. The maximum ROA value was 44.67% at PT Kalbe Farma Tbk in 2016 and 2017, while the minimum ROA value was 0.0092 at PT Gas Negara Tbk in 2017.

4.2. Panel Data Regression Estimation Model

This research uses panel data analysis techniques with a Common Effect, Fixed Effect, and Random Effect model approach. Based on the Chow Test, the Fixed Effect model is chosen. The next test was based on the Hausman Test; the Random Effect model was selected. At the Lagrange Multiplier Test stage, the Random Effect model was selected. The results of panel data regression with the Random Effect model can be seen in Table 1.

Table 1: Panel Data Regression Results with Random Effect Model

Variable	Coefficient	p-value	Decision
GI	0.389017	0.0117	Positive influence
CSR	-1.901782	0.0692	No effect
GCG	1.421555	0.0458	Positive influence

Source: Data processing results, 2022

Referring to Table 1 above, the resulting regression equation is as follows:

$$YPBV = 5,879 + 0,389 \text{ GI} - 1,90 \text{ CSR} + 1,422 \text{ GCG}$$

According to Gujarati & Porter (2009), equations that meet classical assumptions use the Generalized Least Square (GLS) method. In contrast, those that meet the GLS method are random effect models (REM). Meanwhile, the fixed effect model (FEM) and standard effect model (CEM) use Ordinary Least squares (OLS). Because the model chosen in this research is a random effect model, there is no need to test classical assumptions.

4.3. Partial and Simultaneous Test Results

The results of panel data regression with the Random Effect Model produce a summary of the results of the t-test and F-test in Table 2 below:

Table 2: Results of the T-test and F-test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GI	0.389017	0.142963	2.721102	0.0117
CSR	-1.901782	1.001704	-1.898547	0.0692
GCG	1.421555	4.682345	0.303599	0.0458
C	5.879242	5.433907	1.081955	0.2896

R-squared	0.337273	Mean dependent var	0.265110
Adjusted R-squared	0.231237	S.D. dependent var	0.497673
S.E. of regression	0.436355	Sum squared resid	4.760141
F-statistic	3.180735	Durbin-Watson stat	2.049506
Prob(F-statistic)	0.030480		

d F-test

Source: Data processing results, 2022

Paying attention to Table 2 above, the Green Investment (GI) variable positively affects Company Value because the $\square$ -value is $0.0117 < 0.05$, and the regression coefficient value is 0.389. This shows the acceptance of hypothesis 1: Green Investment positively affects company value. The Green Investment (GI) variable positively affects the Company Value of 0.389. If GI increases by 1 unit, the Company Value will increase by 0.389 units, assuming other variables remain constant.

However, the Corporate Social Responsibility (CSR) variable does not affect company value because the $\square$ -value is $0.0692 > 0.05$ with a regression coefficient of -1.902. This means that hypothesis 2 is rejected.

Furthermore, the Good Corporate Governance (GCG) variable is proven to be able to influence Company Value because the $\square$ -value is $0.0457 < 0.05$. This shows the acceptance of hypothesis 3: Good Corporate Responsibility positively affects company value. The Good Corporate Responsibility (GCG) variable positively affects the Company Values of 1.422. If GCG increases by 1 unit, then the Company Value increases by 1.42 units, assuming other variables remain constant.

The results of the simultaneous test (F-Test) show that the variables Green Investment (GI), Good Corporate Responsibility (GCG), and Corporate Social Responsibility (CSR) simultaneously influence Company Value. This can be seen from the prob (f-statistic) value of $0.030480 < 0.05$. Thus, hypothesis 4 is accepted: Green Investment, Corporate Social Responsibility, and Good Corporate Governance simultaneously influence Company Value. The determinant coefficient value based on the adjusted R-square value is 0.231237, indicating that Green Investment (GI), Good Corporate Responsibility (GCG), and Corporate Social Responsibility (CSR) are simultaneously able to influence Company Value by 23.12%, while 76.88 % influenced by other variables not examined in this study.

4.4 Moderated Regression Analysis (MRA) Test Results

In the next stage, this research tests the ability of profitability proxied by ROA to moderate the relationship between Green Investment (GI), Good Corporate Responsibility (GCG), and Corporate Social Responsibility (CSR) on Company Value. Testing uses moderate regression analysis (MRA), with test results in Tables 3, 4, and 5.

Table 3 displays the results of the MRA test to determine the ability of profitability to moderate the relationship between GI and Company Value. Based on Table 3, the probability value (M1) is $0.4468 > 0.05$. This shows that profitability cannot moderate the relationship between GI and Company Value. Thus, hypothesis 5 is rejected.

Table 3: MRA test results: ROA as a moderator of the relationship between GI and company value

<u>Variable</u>	<u>Coefficient</u>	<u>Std. Error</u>	<u>t-Statistic</u>	<u>Prob.</u>
GI	-0.443828	0.242957	-1.826778	0.0792
ROA	1.126802	4.798565	0.234821	0.8162
M1	0.968853	1.254353	0.772392	0.4468
C	3.469496	0.966444	3.589962	0.0013

Source: Data processing results, 2022

Table 4 shows the test results to prove the role of profitability as a moderator of the relationship between CSR and Company Value. The profitability value (M2) is $0.1988 > 0.05$. This shows that profitability cannot moderate the CSR and Company Value relationship. Thus, hypothesis 6 is rejected.

Table 4: MRA test results: ROA as a moderator of the relationship between CSR and company value

<u>Variable</u>	<u>Coefficient</u>	<u>Std. Error</u>	<u>t-Statistic</u>	<u>Prob.</u>
CSR	-0.631511	1.242113	-0.508417	0.6154
ROA	6.531441	4.410867	1.480761	0.1507
M2	-14.76589	11.19717	-1.318717	0.1988
C	2.367437	0.828299	2.858192	0.0083

Source: Data processing results, 2022

The test results in Table 5 show that profitability can moderate the relationship between GCG and Company Value. This is indicated by the probability value (M3) of $0.0313 < 0.05$. Thus, hypothesis 7 is rejected.

Table 5: MRA test results: ROA as a moderator of the relationship between GCG and company value

<u>Variable</u>	<u>Coefficient</u>	<u>Std. Error</u>	<u>t-Statistic</u>	<u>Prob.</u>
GCG	0.180018	2.755577	0.065329	0.9484
ROA	81.95051	34.42261	2.380718	0.0249
M3	-65.36006	28.71890	-2.275855	0.0313
C	1.340897	3.384880	0.396143	0.6952

Source: Data processing results, 2022

4.4 Discussions

4.4.1 Effect of Green Investment (GI) on Company Value

The results of hypothesis testing show that Green Investment positively affects company value (PBV). The results of this research support the legitimacy theory. When a company aligns its business activities with social values and norms, it will gain community recognition, increasing its value. Companies that are members of the Sri-Kehati Index gain legitimacy because they responsibly make environmentally friendly investments (green investments) by complying with environmental ethics. These companies reduce carbon emissions and use green energy and green technology. The results of this study align with the research of Chariri et al. (2018) and Li et al. (2018).

Companies that are members of the Sri-Kehati Index tend to have good financial performance because they pay attention to environmental issues to improve their image and maintain legitimacy. This has an impact on increasing the company's reputation and competitive advantage. This research proves that company value or financial performance will increase when implementing environmentally friendly investment policies (green investment) (Chariri et al., 2018; Li et al., 2018).

In addition, ESG disclosure (including green investment) can also increase company value through good transparency, accountability, and stakeholder trust (Li et al., 2018).

4.4.2 The Influence of Corporate Social Responsibility (CSR) on Company Value

The results of hypothesis testing also show that corporate social responsibility (CSR) does not affect company value (PBV). This research results differ from legitimacy theory, which states that company value will increase if the company makes legitimacy efforts, such as aligning company values with social values and norms. This is supported by the research results of Fatemi et al. (2018) and Junius et al. (2020), who found that company CSR activities significantly reduce company value.

This finding may occur because of the public's perspective that sustainable development will not provide additional value to the company and will not influence their decision to purchase a product or service. This result contradicts the signalling theory, which states that the general public will perceive information regarding a company's sustainable development as a signal of positive activities. Meanwhile, in reality, it does not produce any returns for the company (Junius et al. (2020)

4.4.3. The Influence of Good Corporate Governance (GCG) on Company Value

Further hypothesis testing shows that good corporate governance positively affects company value. The results of this research support agency theory, which states that company value will increase if good corporate governance policies are implemented in the company. This can limit conflicts between shareholders or principals and managers or agents delegated to manage company operations. This theory states that if companies provide incentives in the form of monitoring costs and bonding costs designed to mitigate or reduce the possibility of deviant agent activity, companies can achieve their primary objective, namely to maximise company value (Brigham & Houston, 2012; Jensen & Meckling, 1976).

The results of this research are also supported by (Abdi et al. (2022), who found that the governance dimension in ESG significantly positively influences company value. This is because of the real benefits that underlie good corporate governance policies, such as implementing responsible leadership and independent supervision to ensure maximum shareholder benefits and implementing sustainable reporting strategies.

4.4.4 The Simultaneous Influence of Green Investment, Corporate Social Responsibility, and Good Corporate Governance on Company Value

The results of simultaneous hypothesis testing show that green investment (GI), corporate social responsibility (CSR), and good corporate governance (GCG) simultaneously influence company value as proxied by price book value (PBV). Price book value is influenced by green investment (GI), corporate social responsibility (CSR), and good corporate governance (GCG)

by 23.12%, and the remaining 76.88% is explained by other variables not examined in this research.

The results of this study are in line with the findings of Nekhili et al. (2017), which state that environmental, social, and governmental (ESG) performance together influences market value or company value. A possible explanation is that the ESG pillars implemented by the company can form an alliance between managers and shareholders that balances the power of shareholders. In addition, high ESG performance indicates high corporate spending in CSR activities that can generate greater profits for employees at the expense of shareholders.

4.4.5 The Effect of Green Investment (GI) on Company Value with Profitability as a Moderating Variable

The results of hypothesis testing using Moderated Regression Analysis (MRA) show that profitability cannot moderate the relationship between green investment and company value (PBV). This indicates that profitability cannot strengthen the influence of green investment on company value.

Thus, this shows that profitability as a moderating variable is classified as a potential moderating variable where the moderating and interaction variables do not significantly influence. Moderating variables have the potential to become moderating variables that influence the strength of the relationship between the predictor variable and the dependent variable. This variable does not interact with the predictor variables or have a significant relationship with the dependent variable.

4.4.6 The Influence of Corporate Social Responsibility (CSR) on Company Value with Profitability as a Moderating Variable

The Moderated Regression Analysis (MRA) test results show that the interaction of corporate social responsibility and profitability does not affect company value (PBV). This means that profitability cannot moderate the relationship between corporate social responsibility and company value (PBV). This research shows that profitability as a moderating variable in the relationship between corporate social responsibility and company value is classified as a potential moderating variable where the moderating variable and interaction variable do not significantly influence. Moderating variables have the potential to become moderating variables that influence the strength of the relationship between the predictor variable and the dependent variable. This variable does not interact with the predictor variables or have a significant relationship with the dependent variable.

4.4.7 The Influence of Good Corporate Governance (GCG) on Company Value with Profitability as a Moderating Variable

On the other hand, the results of the Moderated Regression Analysis (MRA) test show that the interaction of good corporate governance and profitability affects company value (PBV). This means profitability can moderate the relationship between good corporate governance and company value (PBV). Meanwhile, the coefficient value of the interaction of good corporate governance and profitability (M1) on company value (PBV) is -65.36006. This figure has a negative value, which means that for every 1% increase in the interaction of good corporate governance and profitability as proxied by ROA, the company value decreases by 65.36% and vice versa. Thus, this study's sixth hypothesis (H6) can be accepted.

This research shows that profitability as a moderating variable in the relationship between good corporate governance and company value is classified as a pseudo or quasi-moderating variable where the moderating variable and interaction variable have a significant influence. A quasi-moderator is a variable that moderates the relationship between a predictor variable and a dependent variable, where the quasi-moderating variable interacts with the predictor variable while also becoming a predictor variable.

5. Conclusion

This research shows that green investment and suitable corporate governance variables have a positive effect, and the corporate social responsibility variable has no effect. The profitability variable can moderate the relationship between good corporate governance and company value. However, it cannot moderate the relationship between green investment and company value and the relationship between corporate social responsibility and company value in companies included in the SRI-KEHATI Index stock group for the 2016-2020 period.

Simultaneous testing in this research shows that the variables green investment, corporate social responsibility, and good corporate governance jointly influence the company value of companies that are members of the SRI- KEHATI Index stock group for the 2016-2020 period.

Reference :

- Abdi, M. Burhanudin, C. Amran, A. & Burhanudin, B. (2022). The Investment Risk of Banking Companies on IDX and The Effect of Good Corporate Governance. *SENTRALISASI*, 11(2), 132–146. <https://doi.org/10.33506/sl.v11i2.1614>
- Ameer, R. & Othman, R. (2012). Sustainability Practices and Corporate Financial Performance : A Study Based on the Top Global Corporations. *Journal of Business Ethics*, 108, 61–79. <https://doi.org/10.1007/s10551-011-1063-y>
- Anik, S. Chariri, A. & Isgiyarta, J. (2021). The Effect of Intellectual Capital and Good Corporate Governance on Financial Performance and Corporate Value : A Case Study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(4), 391–402. <https://doi.org/10.13106/jafeb.2021.vol8.no4.0391>
- Archel, P. Husillos, J. Larrinaga, C. & Spence, C. (2009). Social Disclosure, Legitimacy Theory and The Role of The State. *Accounting, Auditing & Accountability Journal*, 22(8), 1284–1307. <https://doi.org/10.1108/09513570910999319>
- Asni, N., & Agustia, D. (2022). Does corporate governance induce green innovation? An emerging market evidence, Corporate Governance. *The International Journal of Business in Society*, 22(7), 1375–1389. <https://doi.org/10.1108/CG-10-2021-0389>
- Brigham, E. & Houston, J. (2012). *Fundamentals of Financial Management*. Harcourt Brace College.
- Chariri, A. Faisal, F. Prasetya, A. & Haryanto. (2018). Is The Relationship Between Corporate Social Responsibility Disclosure and Earnings Management A Complement Mechanism or A Substitute Mechanism ? *International Journal Business Governance and Ethics*, 13(1), 1–14. <https://doi.org/10.1504/IJBGE.2018.095411>

- Chen, Q. Ning, B, Y, P. & Xiao, J. (2021). Green Finance and Outward Foreign Direct Investment: Evidence From A Quasi-Natural Experiment of Green Insurance in China. *Asia Pacific Journal of Management*, 39, 899-924. <https://doi.org/10.1007/s10490-021-09792-8>
- Fatemi, A. Glaum, M. & Kaiser, S. (2018). ESG Performance and Firm Value: The Moderating Role Of Disclosure. *Global Finance Journal*, 38, 45–64. <https://doi.org/10.1016/j.gfj.2017.03.001>
- Fernando, S. & Lawrence, S. (2014). A Theoretical Framework For CSR Practices: Integrating Legitimacy Theory, Stakeholder Theory and Institutional Theory. *Journal of Theoretical Accounting Research*, 10(1), 149-178.
- Freeman, R. E. (2015). Corporate Social Responsibility and Sustainability in Scandinavia : An Overview. *Journal of Business Ethics*, 127, 1–15. <https://doi.org/10.1007/s10551-014-2224-6>
- Ganda, F. Ngwakwe, C. & Ambe, C. (2015). Profitability as a Factor that Spurs Corporate Green Investment Practices in Johannesburg Stock Exchange (JSE) Listed Firms, *Managing Global Transition: International Research Journal*, 13(3).
- Gregory, A. Tharyan, R. & Whittaker, J. (2014). Corporate Social Responsibility and Firm Value: Disaggregating The Effects on Cash Flow, Risk and Growth. *Journal of Business Ethics*, 124, 633–657. <https://doi.org/10.1007/s10551-013-1898-5>
- Gujarati, D. & Porter, D. (2009). *Basic Econometrics. 5th Edition*. New York The McGraw-Hill, Inc.
- Hafiz, M. Ain, N. Fadhirul, M., Mohd, A., Mohd, F., & Said, J. (2016). *Company Characteristics and Corporate Social Responsibility Disclosure of Malaysian Listed Companies*. 68-75
- Han, L. Jin, J. Wu, L. & Zeng, H. (2020). The Hedging Effect of Green Bonds on Carbon Market Risk. *International Review of Financial Analysis*, 71, 101509. <https://doi.org/10.1016/j.irfa.2020.101509>
- Huang, L. & Lei, Z. (2021). How Environmental Regulation Affects Corporate Green Investment: Evidence From China. *Journal of Cleaner Production*, 279, 123560. <https://doi.org/10.1016/j.jclepro.2020.123560>
- Indriastuti, M. & Chariri, A. (2021). The Role of Green Investment and Corporate Social Responsibility Investment on Sustainable Performance. *Cogent Business & Management*, 8(1), 1960120. <https://doi.org/10.1080/23311975.2021.1960120>
- Jefri, R. (2018). Teori Stewardship dan Good Governance. *Economics Bosowa*, 4(3), 14–28.
- Jensen, M. & Meckling, W. (1976). Theory of the firm: Managerial behaviour, Agency Costs and Capital Structure. *Journal of Financial Economics*, 3, 305–360.
- Junius, D. Adisurjo, A. Rijanto, Y. & Adelina, Y. (2020). The Impact of ESG Performance on Firm Performance and Market Value. *Jurnal Aplikasi Akuntansi*, 5(1), 21–41. <https://doi.org/10.29303/jaa.v5i1.84>

- Khalid, F. Naveed, K. Nawaz, R. Sun, X. & Wu, Y. (2023). Does Corporate Green Investment Enhance Profitability? An Institutional Perspective: Does Corporate Green Investment Enhance Profitability? *Economic Research-Ekonomika Istraživanja*, 36(1), 1–24. <https://doi.org/10.1080/1331677X.2022.2063919>
- Khan, S. A. Jian, C. Zhang, Y. Golpira, H. Kumar, A. & Sharif, A. (2019). Environmental, Social and Economic Growth Indicators Spur Logistic Performance: From The Perspective of South Asian Association For Regional Cooperation Countries. *Journal of Cleaner Production*, 214, 1011–1023. <https://doi.org/10.1016/j.jclepro.2018.12.322>
- Kumarasiri, J. & Jubb, C. (2016). Carbon Emission Risks and Management Accounting: Australian Evidence. *Accounting Research Journal*, 29(2), 137–153. <https://doi.org/10.1108/ARJ-03-2015-0040>
- Lee, K. Cin, B. & Lee, E. (2016). Environmental Responsibility and Firm Performance: Applying An Environmental, Social and Governance Model. *Business Strategy and the Environment*, 25(1), 40–53. <https://doi.org/10.1002/bse.1855>
- Li, D. Zhang, L. Yi, N. & Chen, X. (2018). Does Institutional Pressure Foster Corporate Green Innovation? Evidence From China's Top 100 Companies. *Journal of Cleaner Production*, 188, 304–311. <https://doi.org/10.1016/j.jclepro.2018.03.257>
- Luan, C. Tien, C. & Chen, W. I. (2016). Which “Green” is Better? An Empirical Study of The Impact of Green Activities on Firm Performance. *Asia Pacific Management Review*, 2(21), 102–110. <https://doi.org/10.1016/j.apmr.2015.12.001>
- Mahrani, M. & Soewarno, N. (2018). The Effect of Good Corporate Governance Mechanism and Corporate Social Responsibility with Earnings Management as Mediating Variable. *Asian Journal of Accounting Research*, 3(1), 41–60.
- Marnelly, T. (2012). Corporate Social Responsibility (CSR): Tinjauan Teori dan Praktek di Indonesia. *Jurnal Aplikasi Bisnis*, 2(2), 49–59.
- Mukhtaruddin, M. Ubaidillah, U. & Dewi, K. (2019). Good Corporate Governance, Corporate Social Responsibility, Firm Value, and Financial Performance as Moderating Variables. *Indonesian Journal of Sustainability Accounting and Management*, 3(1), 55–64. <https://doi.org/10.28992/ijsam.v3i1.74>
- Nakamura, E. (2011). Does Environmental Investment Contribute to Firm Performance? An Empirical Analysis Using Japanese Firms. *Eurasian Business Review*, 1, 91–111. <https://doi.org/10.14208/BF03353800>
- Nayenggita, G. Raharjo, S. & Resnawaty, R. (2019). Praktik Corporate Social Responsibility (CSR) di Indonesia. *Jurnal Pekerjaan Sosial*, 2(1), 61–66. <https://doi.org/10.24198/focus.v2i1.23119>
- Nekhili, M. Nagati, H. Chtiouti, T. & Rebolledo, C. (2017). Corporate Social Responsibility Disclosure and Market Value: Family versus non-Family Firms. *Journal of Business Research*, 77, 41–52. <https://doi.org/10.1016/j.jbusres.2017.04.001>

- Oktaviani, N. (2019). *The Impact of Environmental Performance and Environmental Disclosure on Firm Value With Profitability as a Moderating Variable* (Doctoral dissertation, Universitas Jenderal Soedirman).
- Panda, B. & Leepsa, N. M. (2017). Agency theory : Review of Theory and Evidence on Problems and Perspectives. *Indian Journal of Corporate Governance*, 10(1), 74-95. <https://doi.org/10.1177/0974686217701467>
- Panggau, N. D., & Septiani, A. (2017). Pengaruh Eco-Efficiency Terhadap Nilai Perusahaan Dengan Leverage dan Profitabilitas Sebagai Variabel Moderasi. *Diponegoro Journal of Accounting*, 6(4), 421-428.
- Popescu, G. H. Andrei, J. V. Nica, E., Mieiă, M., & Panait, M. (2019). Analysis of The Impact of Investments, Energy Use and Domestic Material Consumption In Changing The Romanian Economic Paradigm. *Technological and Economic Development of Economy*, 25(1), 59-81. <https://doi.org/10.3846/tede.2019.7454>
- Putri, M. Firmansyah, A. & Labadia, D. (2020). Corporate Social Responsibility Disclosure, Good Corporate Governance, Firm Value: Evidence from Indonesia's Food and Beverage Companies. *The Accounting Journal of Binaniaga*, 5(2), 113–122.
- Putriani, R. M. (2019). The Influence of Green Investment and Good Corporate Governance (GCG) on Company Value at PT Bank X (Persero) Tbk. 2011-2017 Period. *STIE Ekuitas*.
- Rahayu, S. D., & Paramita, S. V. (2023). *The Role Of Corporate Social Responsibility In Moderating The Effect Of Financial Performance*. 16(1), 91–97.
- Ross, S. . (1977). The Determination of Financial Structure: The Incentive Signaling Approach. *The Bell Journal of Economics*, 8, 23–40. <https://doi.org/10.2307/3003485>
- Santis, P. Albuquerque, A. & Lizarelli, F. (2016). Do Sustainable Companies Have Better Financial Performance? A Study on Brazilian Public Companies. *Journal of Cleaner Production*, 133, 735–745. <https://doi.org/10.1016/j.jclepro.2016.05.180>
- Siedschlag, I., & Yan, W. (2023). Do Green Investments Improve Firm Performance? Empirical Evidence From Ireland. *Technological Forecasting and Social Change*, 186, 122–181.
- Suhadak, S. Kurniaty, L. Handayani, S. & Rahayu, S. (2019). Stock Return and Financial Performance as Moderation Variable in Influence of Good Corporate Governance Towards Corporate Value. *Asian Journal of Accounting Research*, 4(1), 18–34.
- Tanasya, A. & Handayani, S. (2020). Green Investment Dan Corporate Governance Terhadap Nilai Perusahaan : Profitabilitas Sebagai Pemediasi. *Jurnal Bisnis Dan Akuntansi*, 22(2), 225–238. <https://doi.org/10.34208/jba.v22i2.727>
- Widigdo, I. (2013). Effect of Corporate Social Performance, Intellectual Capital, Ownership Structure, And Corporate Governance on Corporate Performance and Firm Value (Studies On Companies Listed In The Sri Kehati Index). *International Journal of Business, Economics and Law*, 2(1), 87–106.

-
- Yao, X. Cheng, Y. & Du, K. (2021). Environmental Regulation, Green Technology Innovation, and Industrial Structure Upgrading: The Road to The Green Transformation of Chinese Cities. *Energy Economics*, 98, 105–247. <https://doi.org/10.1016/j.eneco.2021.105247>
- Yatie, S. H. & Tandika, D. (2019). Pengaruh Indeks Green Investment Terhadap Kinerja Keuangan Perusahaan Serta Dampaknya Pada Return Saham Perusahaan. *Jurnal Manajemen*, 5(1), 107–114. <http://dx.doi.org/10.29313/v0i0.14797>

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